

IN THE CLAIMS:

Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough and underlining. This listing also reflects any cancellation and/or addition of claims.

1-33. (cancelled)

34. (currently amended) A method of using a graphics processor to reduce visual artifacts, comprising:

receiving an instruction for selectively enabling gamma correction of a selected class of primitive types, said selected class including at least one member selected from a group of at least two different primitive types;

rasterizing primitives of a graphical image to generate fragments; ~~and~~

for ~~at least one~~ each pixel partially covered by a primitive of a primitive type belonging to said selected class of primitive types, gamma correcting its coverage value to form at least one gamma corrected coverage value; and

for each pixel partially covered by a primitive of a primitive type not belonging to said selected class of primitive types, not gamma correcting its coverage value.

35. (previously presented) The method of claim 34, wherein said group of at least two different primitive types consists of a line, a stippled line, a circle, and a polygon.

36. (previously presented) The method of claim 34, further comprising: providing a user interface for a user to input a command for selecting members of said selected class.

37. (previously presented) The method of claim 34, further comprising: providing a user interface for a user to disable gamma correction of all members of said group.

38. (previously presented) The method of claim 34, further comprising: providing a user interface for a user to enable gamma correction of all members of said group.

39. (previously presented) The method of claim 36, further comprising:
receiving a command from said user interface specifying a display type; and
determining a gamma correction factor appropriate for said display type.
40. (previously presented) The method of claim 34, wherein said instruction enables gamma correction of one or more types of primitives for a particular scene.
41. (currently amended) A method of forming smoothed primitives in a graphics system having a CPU and a graphics processor, comprising:
receiving a request from a user to selectively enable gamma correction of a selected class of primitive types, said selected class including at least one member selected from a group of at least two different primitive types;
determining a gamma correction factor for said selected class of primitive types;
in said graphics processor, determining a coverage value per pixel for each fragment of a primitive; ~~and~~
in said graphics processor, gamma correcting ~~each said coverage value~~ values of fragments generated for primitives having a primitive type belonging to said selected class of primitives ~~said selected class of primitive types to form gamma corrected coverage values~~, said gamma correction factor being selected to account for a non-linear response of a display, said graphics processor not performing gamma correction of coverage values for primitives having a primitive type not belonging to said selected class of primitive types; and
in said graphics processor, performing an anti-aliasing process using said gamma corrected coverage values in place of corresponding coverage values.
42. (previously presented) The method of claim 41, wherein said group of at least two different primitive types consists of a line, a stippled line, a circle, and a polygon.
43. (previously presented) The method of claim 41 wherein:
said performing includes blending partially covered pixels with background pixels, with a weight assigned to partially covered pixels being given by the gamma corrected coverage value

and a weight assigned to background pixels being one minus the gamma corrected coverage value.

44. (previously presented) The method of claim 41, wherein said anti-aliasing process generates an anti-aliased image, the method further comprising: in a display, gamma correcting each pixel of said antialiased image.

45-46. (cancelled)

47. (currently amended) A graphics system, comprising:

a graphics processor, including:

a geometry processor to generate geometric primitives;

a rasterizer to convert geometric primitives into fragments;

a coverage completion module to calculate a coverage value per pixel of a primitive; ~~and~~

a look up table to store a gamma correction factor for gamma correction of a selected class of primitive types, said selected class including at least one member selected from a group of at least two different primitive types; and

said graphics processor performing gamma correction of coverage values of primitives having a primitive type belonging to said selected class of primitive types, said graphics processor not performing gamma correction of coverage values for primitives having a primitive type not belonging to said selected class of primitive types in said selected class using said gamma correction factor.

48. (previously presented) The method of claim 47, wherein said group of at least two different primitive types consists of a line, a stippled line, a circle, and a polygon.

49. (previously presented) The graphics system of claim 47, wherein said gamma correction factor is written into said lookup table in response to a user request.

50. (previously presented) The graphics system of claim 47, further comprising:
a blending processor adapted to blend partially covered pixels with background pixels to achieve sub-pixel resolution of edges of primitives, wherein said blending processor uses said gamma corrected coverage values for coverage values used to anti-alias said primitive.
51. (previously presented) The graphics system of claim 47, wherein said graphics processor is configured to receive said gamma correction factor in response to a user input entered from a graphical user interface.
52. (previously presented) The graphics system of claim 47, further comprising:
a central processing unit having an associated system memory, said central processing unit and said associated system memory coupled to said graphics processor by a bus.
53. (previously presented) The graphics system of claim 52, further comprising:
a user interface for a user input commands to selectively enable gamma correction of two or more different types of primitives.
54. (previously presented) The graphics system of claim 52, further comprising:
a user interface for a user to input commands to enable or disable gamma correction of partially covered primitives.
55. (previously presented) The graphics system of claim 47, wherein said lookup table is run time loadable.